

WHAT IS CLAIMED IS:

1. A method for fabricating a ceramic substrate comprising the steps of:

forming a basic layer by screen-printing a first dielectric material in a first region of a base and screen-printing a second dielectric material of a dielectric constant different from a dielectric constant of the first dielectric material in a second region of the base, the basic layer including a first dielectric layer of the first dielectric material and a second dielectric layer of the second dielectric material;

releasing the basic layer from the base; and

sintering the basic layer released from the base.

2. The method for fabricating a ceramic substrate according to claim 1, wherein

the step of forming the basic layer on the base is repeatedly performed to sequentially form on the base a plurality of the basic layers including the first dielectric layer and the second dielectric layer.

3. The method for fabricating a ceramic substrate according to claim 2, wherein

the first dielectric layer of at least one of the basic layers of a plurality of the basic layers has a dielectric constant different from a dielectric constant of the first dielectric layers of the other basic layers.

4. The method for fabricating a ceramic substrate

according to claim 1, wherein

the step of forming the basic layer further includes the step of screen-printing a third dielectric material in a third region of the base at a periphery of the first region to form a third dielectric layer for mitigating stress generated between the first dielectric layer and the second dielectric layer.

5. The method for fabricating a ceramic substrate according to claim 2, wherein

the step of forming the basic layer further includes screen-printing a third dielectric material in a third region of the base at a periphery of the first region to form a third dielectric layer for mitigating stress generated between the first dielectric layer and the second dielectric layer.

6. The method for fabricating a ceramic substrate according to claim 4, wherein

the third dielectric material has a material composition which is middle between a material composition of the first dielectric material and a material composition of the second dielectric material.

7. The method for fabricating a ceramic substrate according to claim 5, wherein

the third dielectric material has a material composition which is middle between a material composition of the first dielectric material and a

material composition of the second dielectric material.

8. The method for fabricating a ceramic substrate according to claim 1, wherein

in the step of forming the basic layer, a conductor paste is screen-printed in a fourth region of the substrate to form a via.

9. The method for fabricating a ceramic substrate according to claim 2, wherein

in the step of forming the basic layer, a conductor paste is screen-printed in a fourth region of the substrate to form a via.

10. The method for fabricating a ceramic substrate according to claim 8, wherein

in the step of forming the basic layer, the via is formed in pole.

11. The method for fabricating a ceramic substrate according to claim 9, wherein

in the step of forming the basic layer, the via is formed in pole.

12. The method for fabricating a ceramic substrate according to claim 1, further comprising, after the step of forming the basic layer, the step of

screen-printing a conductor paste on the basic layer to form a conductor layer.

13. The method for fabricating a ceramic substrate according to claim 2, further comprising, after the step

of forming the basic layer, the step of

screen-printing a conductor paste on the basic layer to form a conductor layer.

14. The method for fabricating a ceramic substrate according to claim 12, further comprising, after the step of forming the conductor layer, the step of

pressurizing the basic layer including the first dielectric layer the second dielectric layer at the surface where the conductor layer is formed to planarize the surface of the basic layer, where the conductor layer is formed.

15. The method for fabricating a ceramic substrate according to claim 13, further comprising, after the step of forming the conductor layer, the step of

pressurizing the basic layer including the first dielectric layer the second dielectric layer at the surface where the conductor layer is formed to planarize the surface of the basic layer, where the conductor layer is formed.

16. The method for fabricating a ceramic substrate according to claim 12, wherein

a circuit formed of the first dielectric layer and the conductor layer has at least two functions of a transmission interconnection circuit, antenna, a low-pass filter, a high-pass filter, a band-pass filter and a capacitor.

17. The method for fabricating a ceramic substrate according to claim 13, wherein

a circuit formed of the first dielectric layer and the conductor layer has at least two functions of a transmission interconnection circuit, antenna, a low-pass filter, a high-pass filter, a band-pass filter and a capacitor.

18. The method for fabricating a ceramic substrate according to claim 1, wherein

in the step of forming the basic layer, the second dielectric material in powder or paste is screen-printed to bury the first dielectric layer in the second dielectric layer.

19. The method for fabricating a ceramic substrate according to claim 2, wherein

in the step of forming the basic layer, the second dielectric material in powder or paste is screen-printed to bury the first dielectric layer in the second dielectric layer.

20. The method for fabricating a ceramic substrate according to claim 1, further comprising the step of

forming the conductor layers on and below the first dielectric layer to form a passive element in the region where the first dielectric layer is formed.